

2003 Schedule of Board Meetings

Jan 9	Quarterly Meeting (Tennessee Engineering Center, Nashville)
Jan 10	Hearings/Conferences
Feb 6-7	Hearings/Conferences
Mar 13-14	Hearings/Conferences
Apr. 24-25	Quarterly Meeting and Open Forum (UT Knoxville)
May 15-16	Hearings/Conferences
Jul 17-18	Quarterly Meeting
Aug 21-22	Hearings/Conferences
Sep 18-19	Retreat and Quarterly Meeting (Pickwick Landing State Park)
Nov. 20-21	Hearings/Conferences

Unless otherwise indicated, all meetings are held in Nashville, Tennessee, in the Davy Crockett Tower, 500 James Robertson Parkway. Please contact the Board office at 615-741-3221 or at 800-256-5758 to verify times and room locations, as the meeting schedule is subject to change.

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New Standard of Care Requirements for Fire Protection Sprinkler Systems

The Board has recently revised its minimum Standard of Care for the design and submittal of Fire Protection Sprinkler Systems and associated systems/components. The new updated Standard of Care requirements, listed below, were adopted by the State Board of Architectural and Engineering Examiners on September 20, 2002, and will become effective April 1, 2003. These requirements represent a minimum design standard and do not restrict the registrant from designing a more complete system.

If you or your firm is offering or decides to offer Fire Protection Sprinkler System design, the Board requests that you use this Standard of Care. Previously, a noticeable lack of design information in Fire Protection Sprinkler System design submittals by or through professional engineers had created many design gaps, which affected the public's health, safety, and welfare and may have led to unexpected, costly field changes after a bidding process. The "Responsible Managing Employee" via his/her

contractor/employer will continue to play an important role in the preparation of "shop drawings", which must first be reviewed by the engineer of record, to ascertain compliance with the engineer's design intent and criteria, before submittal to the "Authority Having Jurisdiction" for review and documentation.

This Standard of Care was developed after consideration of comments received by the Board and addresses concerns of the parties who were represented on the continuing task force established by the Board of Architectural and Engineering Examiners. With the agreement of the State Fire Marshal's Office in the adoption of this Standard, this segment of engineering practice is being restored to the level of responsibility the Board expects the design professional to have over the design of fire protection sprinkler systems. If you are offering or desire to offer Fire Protection Sprinkler System design services, you will need to maintain the necessary level of competence to assume this crucial responsibility.

Standard of Care for Fire Protection System Design (Effective April 1, 2003)

- I. Scaled floor plan drawings on sheets of uniform size, no smaller scale than 1/8"=1'0" to include the following information:
 - A. Name of owner.
 - B. Location, including street address.
 - C. Point of compass.
 - D. Floor plan of each floor (if identical floors, typical plan permitted).
 - E. Description of occupancy and commodity classification as defined in Chapter 2 of NFPA 13, Standard for the Installation of Sprinkler Systems, 1999 edition.

Standard of Care...*cont.*



- F. Type of construction and building height in feet.
- G. Full height building cross section if required to clarify installation of system.
- H. Location of fire walls, large unprotected floor openings, unprotected window openings, fire doors.
- I. Distances to and construction and occupancy of adjacent or nearby exposing buildings or structures where additional protection may be required, e.g., exposure protection.
- J. Type, temperature ratings, and locations of all sprinkler heads in finished areas. Areas subject to build-out at a future date may be described by notes delineating spacing, type of sprinkler heads, etc.
- K. Size and location of risers and standpipes with description and arrangement of valving and accessories, including the location of any and all hose valves, alarms, and signal devices.
 - 1. Area protected by each riser, each system, each floor.
- L. Size and location of all mains and branch lines as required to provide preliminary hydraulic calculations. (See Section III-A, Hydraulic Calculations for further information.)
- M. If the project is in a seismic area, information attesting to this shall be included on the drawings or in the specifications.
- N. The location and size of the hydraulically remote area of coverage.
- O. Fire pump design, specifications and room layout (if required).
- P. Standpipe design (if required) must be completely delineated on the drawings.
- Q. If extensions are made to existing systems, the same information shall be provided for the existing as well as that for the extension, including point of connection to the existing main.
- R. The design drawings shall fully identify the intent of the type of system, such as dry, wet, preaction, and/or deluge.
- S. The engineer shall establish a practical and flexible margin of safety between available water pressure and required demand pressure.

II. Site Plans: The plan (may be combined with floor plans) shall be drawn to scale and shall include all essential details such as:

- A. Size and location of all water supplies.
- B. Size and location of all piping, indicating, where possible, the class and type of new pipe to be installed, and the depth to which it is to be buried.
- C. Indicate size, type, and location of valves. Indicate if located in pit or if operation is by post indicator or key wrench through a curb box.
- D. Indicate the size, type, and location of meters, and backflow devices.
- E. Size and location of hydrants, showing size and number of outlets, and if outlets are to be equipped with independent gate valves. Indicate if hose houses and equipment are to be provided and by whom.
- F. Sprinkler and standpipe risers and monitor nozzles to be supplied by the system.
- G. Location of fire department connections; if part of private fire service main system, including detail of connections.
- H. Water Supply Information:
 - 1. Information regarding whether the main is circulating or dead end.
 - 2. Pressures under flowing and static conditions. If available, information on orifice size and co-efficient of orifice used in the test, as well as pitot pressure.
 - 3. Applicable elevations of slab, floors, ceilings, street main connection, etc.
 - 4. Information regarding who conducted flow test, when, and where the test was conducted. If reliable or current (less than six months old), information is not available, a new flow test should be done under the supervision of the registrant.

III. Hydraulic calculations.

- A. The Engineer shall prepare and submit preliminary hydraulic calculations proving availability of adequate water, (volume and pressure) for protection of the area of greatest demand. This shall be for the hydraulically most remote area, or if present, the standpipe demand. Calculations shall include the information required by NFPA-13.

Disciplinary Action Taken By The Board

INFORMAL CONFERENCES:

On August 15, 2002, the Board conducted the following informal conferences:

ALLEGATION:

Practice outside of areas of competency by an engineer on a school classroom addition.

DECISION:

Letter of reprimand and take and pass the Board's law and rules exam.

ALLEGATION:

Practice outside of areas of competency by an architect for plans submitted on a small retail store.

DECISION:

Letter of assurance from the architect that for projects other than the stores in question, he will consult with other qualified Tennessee registrants.

ALLEGATION:

A company may have offered and provided engineering services with the preparation of plans prior to securing Tennessee registration for one of their engineers involved with the project.

DECISION:

Closed; no disciplinary action taken.



ALLEGATION:

An architectural applicant may have offered and performed services prior to registration.

DECISION:

Letter of caution. The Board also suggested that the applicant always inquire directly with the state in which he is about to do business about its rules and regulations rather than relying on third party information.

Allen Receives NCEES Meritorious Service Award in Law Enforcement

The Board would like to congratulate our Legal Counsel, Christy Allen, who was presented with the Meritorious Service Award in Law Enforcement at the 2002 annual meeting of the National Council of Examiners for Engineering and Surveying (NCEES) in recognition of her accomplishments and work in the law enforcement field.

For the last six and a half years, she has served as the Board's legal counsel and for the past two years has also served as the chief counsel for the Regulatory Boards and Fire Prevention Division(s) within the Department of Commerce and Insurance. In addition to her legal duties to the Board and the Department, she has served on the NCEES Law Enforcement Committee and has been a presenter at several NCEES law enforcement programs.

Allen has represented the Board and presented papers at various professional and technical society meetings through the years; has appeared before numerous legislative committees to present legislation and rules pertaining to the Board; has defended legal challenges to the Engineer's Title Act and legislative changes to the Practice Act; and has provided training to the investigators within the Division of



Legal Counsel Christy Allen with her award, accompanied by (from left to right) associate engineer member Ted Wynne, P.E., board member Melvin Downs, P.E., Executive Director Barbara Bowling, and associate engineer member Philip Lim, P.E.

Regulatory Boards concerning the investigation of architect and engineer competency, plan stamping, and unlicensed practice. In 1998, Allen received the President's Citation for Outstanding Service from the Tennessee Society of Professional Engineers (TSPE).

Professional Privilege Tax

By Christy Allen, Legal Counsel

In 1992, the General Assembly of the State of Tennessee declared that engaging in certain vocations, professions, businesses and occupations was a privilege taxable by the state. Governor Ned McWherter then signed into law the Professional Privilege Tax, and the Department of Revenue began collecting the tax from persons engaged in the professions determined to be taxable by the General Assembly. A number of professionals in Tennessee are subject to the tax, including accountants, attorneys, physicians, real estate brokers, securities broker-dealers and a number of other licensed professionals. In 2002, the General Assembly raised the amount of the annual tax from \$200 to \$400. In addition, full-time State of Tennessee employees were exempted from the tax (2002 Tenn. Pub. Acts 856, § 7).

All architects, landscape architects and engineers registered in Tennessee and in active practice as of June 1 in a given year are required by State law to pay to the State of Tennessee a professional

privilege tax in the amount of \$400. The tax is collected by the Commissioner of

Revenue, and all monies collected thereunder are deposited in the general fund. This law applies to all persons registered to practice these professions as of June 1, whether or not they are Tennessee residents. The professional privilege tax does not apply to registered interior designers.

Under applicable law and pursuant to a Board policy, certain registrants may qualify for inactive status for the purpose of claiming an exemption from the tax. A registrant who does not engage in any activity constituting the practice of architecture, engineering or landscape architecture (including advertising and solicitation) may claim inactive status by filing an affidavit to that effect with the Board. Once the affidavit establishing inactive status is acknowledged and approved by the Board, the registrant should notify the Department of Revenue of his or her inactive status. A registrant may return to active status by first notifying the Board. The Board will also file with the Department of Revenue all the affidavits

establishing inactive status which it receives prior to the June 1 deadline.

In claiming inactive status, the registrant should be aware of a number of factors. In order to qualify for exemption from the tax, the registrant must claim inactive status prior to June 1; a return to active status at any time during the year will render the registrant subject to the tax. Practice includes the public use of the titles "architect," "engineer," "landscape architect" or any other title implying that the individual is an architect, engineer or landscape architect and any offer to render architectural, engineering or landscape architectural services in this state.

If a registrant claims inactive status for the purpose of avoiding the professional privilege tax and thereafter continues to engage in the active practice or any activity construed by the Board to be active practice, that registrant may be found guilty of misconduct and be subject to disciplinary action, which could include the assessment of substantial civil penalties and/or the suspension or revocation of the registrant's certificate of registration.

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Tennessee Board of Architectural and Engineering Examiners Address Change Form



It's the rule ... if you move, you need to give the Board your new mailing address within 30 days. We would also appreciate knowing when you change employers. This is your personal responsibility and not your employer's. We know you want to receive your license renewal notices, newsletters, and other important communications promptly. If you have a change to report, please complete and return this form to the Board

of Architectural and Engineering Examiners, 500 James Robertson Parkway, 3rd Floor, Nashville, TN 37243-1142. You may also submit address changes by e-mail; send them to Frances Smith at <frances.p.smith@state.tn.us>.

Please do **NOT** submit a change of address with payment of the professional privilege tax; the Department of Revenue does not forward these to the Board.

Name _____ Profession _____

Firm/Employer _____ Certificate # _____

Mailing Address (circle: home or work) _____

City, State, and ZIP _____

Phone Numbers (including area code) Home _____ Office _____

E-mail Address _____ Fax Number _____

News From The State Fire Marshal's Office



In March 2002, a public hearing was held regarding changes to Rule 0780-2-3-.04 FEES. With this being the first increase in review fees since the inception of the fees in 1982, the only comment made at the public hearing questioned the use of the funds created. It is the intention of the Department to use the increased revenue in the Codes Enforcement Section so that we may better serve the public. The new rules go into effect December 2, 2002. Plans for projects submitted on or after that date will be subject to plans review fee increases. Such fees are payable at the time of initial submission of plans and specifications, and no review will be performed until the fee has been paid in full.

The new schedule of fees is as follows:

Estimated Cost of Construction	Fee Calculation
\$0.00 to \$1,000,000.00	\$2.00 per thousand or fraction thereof (\$200.00 minimum)
\$1,000,000.01 or more	\$2,000.00 for the first \$1,000,000.00 plus \$1.50 for each additional thousand or fraction thereof.

State buildings, educational occupancies, and day cares that require a permit fee for construction from a local government that has an exempt status will be reduced by one-half.

You can check our new web site location at www.state.tn.us/commerce - FIRE PREVENTION - CODES ENFORCEMENT PLANS REVIEW AND INSPECTIONS, where you will be able to find information about the Section, as well as updated forms and correction lists soon! The new web site should be up and running by December 1, 2002.

Plans Submittal Requirements

The Codes Enforcement Section of the Tennessee State Fire Marshal's Office is responsible for reviewing and approving construction statewide for the following types of occupancies based on the definitions found in NFPA 101:

1. All state owned and State leased facilities;

2. All educational occupancies (K-12), public and private;
3. All day-care centers (including adult day care);
4. All detention and correctional facilities;
5. All places of assembly having an aggregate capacity of 300 or more persons;
6. All business occupancies and residential occupancies three stories or more;
7. All two-story residential occupancies having twelve units or more;
8. All covered mall occupancies;
9. All high hazard industrial occupancies (H-1 and H-2 per SBC definition); and
10. All facilities requiring a State inspection for initial licensure by a State Department.

Construction is defined as the erection of a new building, an addition to an existing building, a change of occupancy, an alteration that alters the exit arrangement, fire resistive assemblies, or type of construction, or involves the installation of fire suppression or detection systems or fuel fired equipment. (Excavation and site preparation are not included.)

There are thirty-one (31) areas that are authorized (by exemption) to perform independent plan reviews for items 4 thru 9 above. These jurisdictions have obtained the exemption authorized by Tennessee Code Annotated §68-120-101(b)(2) and may adopt in lieu of The National Fire Codes either the Standard Fire Prevention Code published by the Southern Building Code Congress International or NFPA 1, The Fire Prevention Code published by the National Fire Protection Association, Inc. These jurisdictions must also adopt the Standard Building Code published by the Southern Building Code Congress International.

The State Fire Marshal's Office, Codes Enforcement Section, must see details on plans for fire rated assemblies (such as

walls, floor/ceilings, roof /ceilings, etc.) that are approved by a nationally recognized testing laboratory such as Underwriters Laboratories, Inc. These details can be found in the Underwriters Laboratories (U. L.) Fire Resistance Directory-Volume 1. The codes mandate fire rated assemblies for various reasons. These rated assemblies are initially tested and approved with no breach of the assembly. Any number of penetrations may occur during construction. These penetrations must be addressed by approved systems such as those found in the U. L. Fire Resistance Directory-Volume 2 "Through-Penetration Fire Stop Systems." Again, we must see the exact detail and application instructions for a particular system.

Also addressed in U. L. Fire Resistance Directory-Volume 2 is the protection of joint systems. There are several types of joints in fire rated assemblies that must be protected, such as floor to floor, wall to wall, floor to wall, and head of wall joints. It is imperative to follow all details of the respective assembly. The fire rated assembly (floor, wall, etc.) must have all details adhered to and the joint system that is to be used must correspond to the fire rated assembly. (i.e., the joint system must correspond to the construction of the fire barrier.) When a fire rated assembly (wall, floor, floor/ceiling, etc.) is specified, the detail and application instructions must be followed exactly. This is how the assembly was tested and approved, and any breach of the assembly, whether by penetrations of building services or by some type of joint, must be protected by a tested and approved system that will maintain the integrity of the fire barrier. This can only be accomplished by using tested and approved through-penetration fire stop systems and joint systems.

The U. L. Fire Resistance Directory-Volume 2 also contains approved systems for items such as building curtain walls as described in the "Perimeter Fire Containment Systems" section.

Barbara's Corner

by Barbara Bowling,
Executive Director
barbara.bowling@state.tn.us

In the closing days of the past legislative session, the Tennessee General Assembly made changes to various tax laws. One of these changes specifically dealt with the professional privilege tax. The two changes that were made were: 1) raising the tax from \$200 to \$400, and 2) exempting full-time State of Tennessee employees from payment of the tax. Because of this legislative change and the frequent questions we receive each year regarding the professional privilege tax, we have updated an article that first appeared in the Winter 1997 issue of Tennessee Design Lines, and are reprinting it in this issue.

The housekeeping amendments to our rules from the January 2002 rulemaking hearing became effective October 2, 2002. You may view and download the updated rules on our website at www.state.tn.us/commerce/ae.html. Additionally, the new rules will be included in the printing of the 2002 edition of the law and rules of the Board which will be distributed to all current registrants of the Board in late 2002/early 2003.

We often receive questions regarding whether a particular situation might violate the Rules of Professional Conduct. One of the more unique questions the Board has received over the last several months was whether registrants participating in a contest program started by an equipment vendor and supplier might be violating the "conflicts of interest" section in the Rules of Professional Conduct, specifically 0120-2-.05(4). In this contest, design professionals are encouraged to provide information about various specifications they used for current projects to assist the equipment vendor(s) sponsoring the contest in bidding on future projects. Specifications did not have to be from the equipment vendor/supplier providing the contest. Individuals providing specifications to the equipment vendor/supplier have their names entered into a drawing that is held

every few months, with contest winners receiving cash prizes (\$250-\$500). While the Board acknowledged that this is a unique marketing tactic, it could present a potential conflict of interest if a registrant is eligible to receive or has the potential to receive some type of monetary or other award on the condition that a particular product is specified. The Rules of Professional Conduct prohibit registrants from soliciting or accepting financial or other valuable considerations from material or equipment suppliers for specifying products, and cannot accept compensation (financial or otherwise) from more than one party for services on or pertaining to the same project, unless the circumstances are fully disclosed to, and agreed to, by all interested parties. A design professional must be able to make independent decisions regarding the full range of products found in the marketplace.

Another question we are often asked addresses the issue of electronic seals and electronic signatures and date of signature. Several years ago, the Rules of Professional Conduct were amended to enable the use of electronic signatures and date of signature. If you decide to utilize an electronic signature, remember you must have a secure method of affixing the seal, signature, and date of signature to the respective plans or documents. Simply keeping your seal and signature on a computer diskette and inserting it into the computer when you need to affix your seal and signature does not meet the criteria of the Rules of Professional Conduct. In order to affix an electronic seal, signature, and date of signature there must be a secure method for affixing it such as entering a password to enable the electronic signature to be affixed. Some software will even enable the electronic seal, signature, and date of signature to disappear if someone other than the registered design professional attempts to make changes to the document. While the Board has not endorsed a particular software program, there is computer software available in the marketplace to accomplish this. Registrants should be aware that scanning or copying the signature for reproduction on documents does not comply with the rule.



The Board and Staff wish to extend our sympathies to the families and friends of these individuals who have honored their professions:

Architects

Carson, John B., #8139
Casey, Thomas A., #11724
Clark, Kenneth Paul, #10582
Mauer, Michael J., #16427
Rodriguez, Arnold C., #23576
Steinberg, Arthur D., #100875

Engineers

Acuff, John E., Jr., #2752
Bryan, Ross Henry, #1729
Bunes, Jan, #103245
Dunn, Albert J., #7012
Gardenhire, Michael C., #22637
Horvilleur, Javier, #106529
Kelly, Brian A., #15543
Kissick, Bert A., #12422
Lemberg, Bradford A., #19094
Martin, George P., #19916
Norman, Charles E., #6361
Oakley, M. Hall, #5740
Petro, Anthony J., #11437
Roberts, Martin S., Jr., #6421
Swindell, William S., #5741

If you have a name that should be recognized in this section, please contact the Board office.

A Level Playing Field

By Ed Johnson, AIA

I have a dream that a qualified registrant can practice in any of our 55 jurisdictions quickly and easily. To do this we must eliminate impediments to reciprocity both for individual registrants and for firms organized with any of several recognized practice formats.

I believe we are close to eliminating the impediments to individual licensure. Currently there are only 3 or 4 significant impediments. These include:

Requirements for a personal interview.

Requirements for taking an additional examination during a personal interview.

During the last several years the leadership of the National Council of Architectural Registration Boards (NCARB) has increased the focus on eliminating these significant impediments. The Southern Conference of NCARB is working to confirm that there are no impediments in our region. As soon as we confirm this, the Southern Conference will be in a position to encourage other regions to join with us.

Currently, I believe most of the states with continuing education have agreed to reciprocate and accept the continuing education requirements of the registrant's base state, thereby eliminating the need to comply with all of the details of each individual state's requirements. There are 2 or 3 states with new continuing education requirements that have not yet confirmed their willingness to reciprocate; however, I believe these will join in with the other states in the near future.

There is a lot to be done to get all states to reciprocate for firm practice and for permitting the use of any of several recognized methods of practice in their jurisdiction. NCARB has a task force working to identify the issues and then to work on finding consensus on a way to allow individual firms organized in a recognized format to be allowed to practice in other states. This should eliminate the need to have multiple formats for a corporation to practice in one jurisdiction in a partnership or corporation or as an individual in another state. I believe our purpose is to protect the public health, safety, and welfare; not to burden ourselves dealing with all this minutia from state to state. I know this involves issues of state's rights and all sorts of unique issues created from state to state; however, it still needs to be resolved.

NCARB is working to facilitate international practice. We have clients that work across the country who really don't want to be bothered with this detail and difference. We need to solve this issue between the various states, then the international issue will be easier to resolve. We can look forward to a level playing field at that point.

Currently some states allow "going fishing" if an architect takes a few initial steps to go on record with their intent to pursue a specific project. Tennessee and most states do not allow this as the laws and rules state that solicitation constitutes the practice of architecture. We have the world's best system of examination and licensure, yet we still have a long way to go to create a level playing field.

Today we have the recognized design

leaders entering Tennessee for specific projects. Sometimes this involves participation in competitions and sometimes they seek individual projects. They often do so without complying with our law. At times these firms may join with local firms. I would encourage local firms to be sure that they do so in a proper manner while working with the out-of-state registrants. As registrants in Tennessee, we have the responsibility to comply with Tennessee law and to report noncompliance by others. I have no issue with out-of-state firms coming here to practice or to seek specific projects; however, I do expect that they comply with the law so that we have a level playing field.

Hopefully some day it will only take a phone call and payment of a registration fee and licensure can be granted in a matter of a few days. Then it will be easy to practice across the 55 jurisdictions and perhaps even internationally.

(Ed Johnson serves as an architect member of the Tennessee State Board of Architectural and Engineering Examiners and currently serves on the NCARB Procedures and Documents Committee which is working with the Impediments to Reciprocity Task Force to identify those issues which present impediments to reciprocity.)

DID YOU KNOW?

That the two most common complaint areas dealt with by the Board are providing services outside one's area of competence and unlicensed practice.



Information On Examinations



The Board would appreciate your sharing information about these professional examinations with interns in your office.

Architecture

Future information about the ARE and free practice software are available at the National Council of Architectural Registration Boards' (NCARB's) web site: www.ncarb.org.

Exam Results (5/10/02-10/23/02)

	Total	Pass
Bldg. Planning	20	14
Bldg. Technology	23	15
Constr. Doc. & Svcs	20	19
Gen. Structures	25	20
Lateral Forces	16	16
Mat. & Meth.	22	21
Mech. & Elec.	22	16
Pre-Design	22	17
Site Planning	16	10

Engineering

• Fundamentals of Engineering Examination-

Application Deadlines:

	Seniors*	Non-seniors**
Spring Exam	Feb. 1	Jan. 15
Fall Exam	Sept. 5	Aug. 1

*Engineering students with senior status in the engineering curriculum.

**Those who have already been awarded an undergraduate degree in engineering.

The FE exam is administered in Chattanooga, Cookeville, Franklin, Knoxville, Martin, and Memphis on:

April 12, 2003
October 25, 2003
April 17, 2004

• Principles and Practice of Engineering Examinations-

The application deadline for new applicants for the spring Principles and Practice of Engineering (P&P) exam is December 1. The fall deadline is July 1. The exam will be given in Franklin, Knoxville, and Memphis on:

April 11, 2003
October 24, 2003
April 16, 2004

To facilitate scheduling of the P&P exams, retake requests and fees should be received by the board office by March 1 for the spring exam and September 1 for the fall exam. Registrants wishing to take other exam disciplines must submit a written request to the Board with the exam fee by the above deadlines. The examination fee is currently \$100, and the retake fee is \$175. The Structural II exam fee is \$475. Those wishing to take the Structural II exam must already be registered either by taking the Civil or Structural I exams as the basis for registration.

April 2003 Exam Changes

The Structural Design Standards of the Civil, Structural I, and Structural II exams, and the Transportation Design Standards of the Civil exam will change with the April 2003 exam administration. The Chemical exam will be under a revised specification. The first administration of the Architectural Engineering exam has also been scheduled for April 2003; this exam will focus on building systems, construction management, and general knowledge, including construction and building materials, lateral load and displacement issues, and codes, regulations, and statutes. More information on these changes is available at the National Council of Examiners for Engineering and Surveying (NCEES) website: www.ncees.org.

Exam Results	(4/02)	
	Total	Pass
FE	439	309
P&P	241	132

Landscape Architecture

The Landscape Architect Registration Exam (LARE) will be given in Nashville on:

December 9-10, 2002
June 9-11, 2003

The application deadline for the exam is January 15 of each year.

The June 2002 exam fees are as follows:

	Dec. 2002	Jun. 2003
Section A	\$50	\$60
Section B	\$90	\$100
Section C	\$200	\$200
Section D	\$150	\$160
Section E	\$200	\$200

Exam Results	(6/02)	
	Total	Pass
Section A	12	7
Section B	10	9
Section C	13	5
Section D	11	8
Section E	13	5

Unofficial exam scores are now available at the Council of Landscape Architectural Registration Boards' (CLARB's) web site: www.clarb.org.

Interior Design

The Interior Design Qualification exam will be given on:

April 4-5, 2003
October 3-4, 2003

To request an application for the exam, call the National Council for Interior Design Qualification (NCIDQ) at 202-721-0220. The application deadline for the spring exam is December 1; the deadline for the fall exam is June 1. More information is available at NCIDQ's web site: www.ncidq.org.

Exam Results	4/02 23 examinees	
	Total	Pass
Section I	17	12
Section II	11	10
Section III	15	10

FREQUENTLY ASKED QUESTIONS

QUESTION:

If a designer, owner, contractor, or other nonregistrant prepares plans for a building which requires the use of architects or engineers and applies for a building permit, should the building official suggest that the nonregistrant contact an architect or engineer and have him or her review and place his or her seal on the plans and specifications?

ANSWER:

No. Under Tennessee law, a registrant may not take over, review, revise, or place his or her seal on plans and specifications begun by persons not properly qualified. A registrant may seal only work which he or she has prepared or which has been prepared under his or her responsible charge. The building official should contact the State Board and refuse to issue a permit until appropriately sealed plans are submitted.

QUESTION:

May any person provide inspection or review of buildings or sites to determine if the project construction phase conforms to the architectural and engineering construction documents?

ANSWER:

Yes. However, the Board recommends a registrant of the board provide construction administration or review of construction. Administration of construction contracts is defined as periodic site visits, change orders, shop drawing reviews, and reports to owners of any observed substantial deviation from the contract documents. Building officials who inspect for conformance with building codes are in no way restricted from performing their duties.

QUESTION:

May a Tennessee registrant review and "over seal" plans prepared by an out-of-state professional for a design project in Tennessee?

ANSWER:

No. A qualified registrant of this board may only seal drawings designed and prepared by or under his or her responsible charge. Sealing any drawings prepared by others will result in disciplinary action.

QUESTION:

May an owner, builder, or contractor make changes to final architectural, engineering, or landscape architectural plans?

ANSWER:

No. When plans are prepared by a Tennessee registrant, no changes may be made except by that registrant.

QUESTION:

How do I change my registration status . . .

ANSWER:

- **from INACTIVE to ACTIVE?**
Send the Board a signed and dated request stating that you have not practiced or offered to practice your profession or used your title in Tennessee during the period you claimed inactive status and certification that you have met the continuing education requirement for each year exempt, not to exceed 24 hours. The renewal fee is the same for both active and inactive registrants. Architects, engineers and landscape architects will be billed for the professional privilege tax by the Department of Revenue at a later date.
- **from RETIRED to ACTIVE?**
Send the Board a signed and dated request with the \$140 registration fee stating that you have not practiced or offered to practice your profession in Tennessee during the period you claimed retired status and certification that you have met the continuing education requirement for each year exempt, not to exceed 24 hours. Architects, engineers and landscape architects will be billed for the professional

privilege tax by the Department of Revenue at a later date.

QUESTION:

Who is required to file a firm disclosure?

ANSWER:

Any corporation, partnership or firm offering engineering, architectural or landscape architectural services to the public must file a firm disclosure form with the Board listing the names and addresses of all principals and officers, as well as the principals and officers duly registered to practice architecture, engineering, or landscape architecture in Tennessee who are in responsible charge of such practice in this state. A separate firm disclosure must also be filed for each branch office. A copy of the firm disclosure forms can be downloaded from the Board's web site (www.state.tn.us/commerce/ae.html).

QUESTION:

How often should I update my firm disclosure?

ANSWER:

Anytime there is a change in officers or principals a new firm disclosure is required to be filed with the Board within 60 days of the change.

QUESTION:

What does the Board mean by "principal"?

ANSWER:

A principal is someone who is a full-time employee and is capable of making independent design decisions. This individual must be a registrant of the Board and maintain an active registration status.

QUESTION:

Do I need to submit a fee with the firm disclosure?

ANSWER:

No.

Standard of Care...*cont.*

IV. Specifications

- A. Specifications shall be prepared for fire protection the same as for any other portion of the project.

V. Engineer's Seal

- A. The engineer of record submitting fire protection system design construction documents shall seal, sign, and date each page or sheet of drawings and the first page of specifications and calculations.

VI. Legend

- A. The work to be performed by the fire sprinkler contractor and the site utility contractor should be differentiated on the drawings. Installation work shall be performed in accordance with applicable state law, including but not limited to, Tennessee Code Annotated, Title 62, Chapters 6 (General Contractors) and 32 (Fire Sprinklers Contractors) and the following rules chapter of the Department of Commerce and Insurance Division of Fire Prevention, 0780-2-7.

agreement is reached with the Authority Having Jurisdiction to increase the level of sprinkler density inside the building.

The preliminary calculations referenced in the Standard of Care refer to those calculations initially done by the engineer to prove availability of an adequate water supply in terms of both volume and pressure. Typically, these initial design calculations will involve the few hydraulic nodes from a point of known pressure and volume directly to the area of most demand. In a high rise building this could be as simple as proving availability of an adequate volume and pressure of water to meet the standpipe requirements, a task which should be within the capability of any Mechanical Engineer. If the worst area of demand cannot be satisfied, another alternative must be provided (such as a fire pump) per code.

In a building with several different occupancies and fire loadings, only the worst demand need be calculated. This again on a high rise would be the standpipe demand, but for this discussion, let's assume a one-story building. If the building in this scenario had five different areas, four of which were light hazard, and one that was Ordinary Hazard Group II, only the Ordinary Hazard area would need to be calculated.

The engineer shall establish a practical and flexible margin of safety between the available water pressure and the required demand pressure. Consideration should be given to the probable differences in the sprinkler contractor's calculations and the calculations done by the engineer. When sizing pipe using his/her initial design calculations, the registrant should leave more safety margin than he would require the contractor to leave. The difference in the two margins is due to the fact that the contractor's calculations will (should) enumerate the various fittings and offsets that probably will not be delineated in the engineer's preliminary design.

Recalculation by the engineer typically will not be required if field changes become involved, either intended or unforeseen. Deviations in the field such as offsets around ductwork should be

anticipated, and initial design calculations by the engineer containing a reasonable, practical pressure safety margin should cover these. Hardly any job is installed exactly like it is drawn; there are always field conditions requiring a change. Substantial deviations can and should require the contractor to prove his calculations are still adequate to provide the protection stipulated in the design documents.

A substantial deviation, such as a contractor's proposal for a major design change shall be recalculated and redrawn by the contractor's own Responsible Managing Employee, along with the Responsible Managing Employee's stamp certifying his preparation and submitted for approval and documentation. If a competent sprinkler contractor submits a reasonable proposal for change, and if the contractor's Responsible Managing Employee prepared drawings and calculations meet all the requirements of the engineer's design and there is not a valid reason why the engineer has used a different layout configuration, the engineer probably will (and should) accept the contractor's drawings and calculations.

The contractor's shop drawings and calculations should be submitted to the engineer of record first; the engineer of record records his review via his shop drawing stamp; then the contractor's shop drawings and calculations are sent to the reviewing authority for documentation. The reviewing authority will accept the sprinkler contractor's drawings and calculations even if different from the preliminary design submitted by the engineer as long as they bear an approval stamp from the engineer of record. No actual installation should begin prior to the implementation of this protocol.

Regarding the subject of stamps, some people have mistakenly thought this referred to the Professional Engineer's seal. This is erroneous; what is being referred to is the stamp of approval, rejection, approved as noted, etc. The engineer should never put his P.E. seal on the

FIRE PROTECTION SYSTEMS DESIGN - COMMENTARY

The Standard of Care for Fire Protection Systems Design should be interpreted as a minimum standard of design. Nothing in the Standard of Care is intended to imply that this is the maximum allowable effort by the engineer. Just as the National Fire Protection Association is a minimum requirement (a fact often overlooked) so is the Standard of Care for engineers. There will always be local job conditions, which will influence the amount of fire protection required for the project. An example would be a case where adequate water is not available for manual fire fighting (fire department), so an

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Standard of Care...cont.

sprinkler contractor's drawings or calculations unless he actually prepared them.

The water supply information and flow testing addressed in the Standard of Care asks for a flow test less than six months old. This is desirable, but it is understood there may be circumstances that would prevent this, e.g. a local utility has record of a flow test one year old and will not allow a flow test to be performed by anyone other than their personnel. The authority having jurisdiction will allow some latitude in cases such as this. Also, the engineer does not have to perform the actual flow test, but should verify the accuracy of it.

The registrant's drawings should clearly indicate the point at which the plumbing or site utilities contractor stops and the fire protection sprinkler contractor begins work. This includes that portion of the underground piping to be installed by a licensed fire sprinkler contractor. This point, the so called point of service, is defined in state law, including but not limited to, Tennessee Code Annotated, Title 62, Chapters 6 (General Contractors) and 32 (Fire Sprinkler Contractors) and Rules Chapter 0780-2-7 of the Department of Commerce and Insurance. The drawings are to be done to assure continuity in materials and performance in accordance with the various codes, especially National Fire Protection Association, Chapters #13 and #24.

Please feel free to contact the Board office should you have any questions regarding the new requirements.

Professional Privilege Tax...cont.

A registrant claiming inactive status is still subject to the biennial renewal fee of his or her certificate and will continue to receive the renewal notifications.

The affidavit for inactive status is available at the Board's website (www.state.tn.us/commerce/ae.html), or you may contact the Board office at 615-741-3221 or 800-256-5758 to obtain a copy.

For questions regarding the tax, registrants may contact the Department of Revenue, Taxpayer Services Division at 800-342-1003 (in-state only) or 615-253-0600.

Adapted from Tennessee Design Lines (Winter 1997 edition), revised July 2002.

The Tennessee Department of Commerce and Insurance is committed to the principles of equal opportunity, equal access, and affirmative action. Contact the EEO Coordinator or ADA Coordinator at 615-741-0481, for TDD 615-741-7190.

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